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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

Declaration
Submitted
With Initial
Filing

OR

Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

| | |
|------------------------|--------------|
| Attorney Docket Number | 942418 |
| First Named Inventor | Jiaren Jiang |
| COMPLETE IF KNOWN | |
| Application Number | |
| Filing Date | |
| Art Unit | |
| Examiner Name | |

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Surface Modification of Castings

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Copy Attached? Yes | Certified Copy Attached? No |
|-------------------------------------|---------|----------------------------------|--------------------------|------------------------------|-----------------------------|
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

 Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Jiaren Jiang and Xing Yang LiuApplication No./Patent No.: not yet assigned Filed/Issue Date: not yet assignedEntitled: Surface Modification of CastingsNational Research Council of Canada, a Canadian government agency
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or2. an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.**OR**B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

March 16, 2004

Date

519-673-5591

Telephone number

Hans Koenig

Typed or printed name



Signature

Patent Agent

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

| | |
|------------------------|--------------------------------|
| Application Number | |
| Filing Date | |
| First Named Inventor | Jiaren Jiang |
| Title | Surface Modification of Cast.. |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 942418 |

I hereby appoint:

Practitioners associated with the Customer Number:

33798

OR

Practitioner(s) named below:

| Name | Registration Number |
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as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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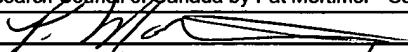
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| <input type="checkbox"/> | Firm or Individual Name | |
| Address | | |
| Address | | |
| City | State | Zip |
| Country | | |
| Telephone | Fax | |

I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

| | | |
|-----------|---|------------------------|
| Name | National Research Council of Canada by Pat Mortimer - SecretaryGeneral | |
| Signature |  | |
| Date | 15 March 04 | Telephone 613-993-4752 |

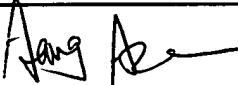
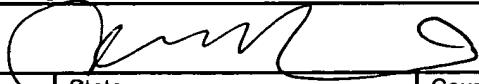
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of 3 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DECLARATION — Utility or Design Patent Application

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| Name ^(Signature) | | | |
| Address ^(Address) | | | |
| City | | State | |
| ZIP | | ZIP | |
| Country | | Telephone | |
| Fax | | Fax | |
| <p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p> | | | |
| NAME OF SOLE OR FIRST INVENTOR: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle [if any]) <i>Jiaren</i> | | Family Name or Surname <i>Jiang</i> | |
| Inventor's Signature  | | Date <i>16-Mar.-2004</i> | |
| Residence: City London | | State Ontario | |
| Country Canada | | Citizenship Canadian | |
| Mailing Address 46 Repton Avenue | | | |
| City London | | State Ontario | |
| ZIP N5X 3G4 | | Country Canada | |
| NAME OF SECOND INVENTOR: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle [if any]) <i>Xing Yang</i> | | Family Name or Surname <i>Liu</i> | |
| Inventor's Signature  | | Date <i>Mar. 16, 2004</i> | |
| Residence: City London | | State Ontario | |
| Country Canada | | Citizenship Canadian | |
| Mailing Address 58 Toohey Lane | | | |
| City London | | State Ontario | |
| ZIP N6G 4Y1 | | Country Canada | |
| <input type="checkbox"/> Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto. | | | |

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| | |
|------------------------|--------------------------------|
| Application Number | |
| Filing Date | |
| First Named Inventor | Jiaren Jiang |
| Title | Surface Modification of Cast.. |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 942418 |

I hereby appoint:

Practitioners associated with the Customer Number:

33798

OR

Practitioner(s) named below:

| Name | Registration Number |
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as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

| | | | |
|-----------|---|-----------|----------------|
| Name | Jiaren Jiang | | |
| Signature |  | | |
| Date | 16 - Mar - 2004 | Telephone | 519 - 430 7121 |

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of 3 forms are submitted.

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| First Named Inventor | Jiaren Jiang |
| Title | Surface Modification of Cast.. |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 942418 |

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as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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| <input type="checkbox"/> | Address | |
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| <input type="checkbox"/> | Country | Zip |
| <input type="checkbox"/> | Telephone | Fax |

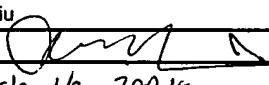
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Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Name Xing Yang Liu

Signature 

X. L.

Date March 16, 2004

Telephone (519) 480-7042

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| Application Number | |
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| First Named Inventor | Jiaren Jiang |
| Title | Surface Modification of Cast.. |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 942418 |

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| <input type="checkbox"/> Firm or Individual Name | | | |
| Address | | | |
| Address | | | |
| City | State | Zip | |
| Country | | | |
| Telephone | Fax | | |

I am the:

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SIGNATURE of Applicant or Assignee of Record

| | | | |
|-----------|---|-----------|--------------|
| Name | National Research Council of Canada by Pat Mortimer - Secretary General | | |
| Signature |  | | |
| Date | 15 March 04 | Telephone | 613-993-4752 |

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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Jiaren Jiang and Xing Yang LiuApplication No./Patent No.: not yet assigned Filed/Issue Date: not yet assignedEntitled: Surface Modification of CastingsNational Research Council of Canada, a Canadian government agency
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or2. an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.**OR**B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:1. From: _____ To: _____
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Reel _____, Frame _____, or for which a copy thereof is attached.2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

March 16, 2004Hans Koenig

Date

Typed or printed name519-673-5591Signature

Telephone number

Patent AgentTitle

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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